

MIXING ZONES and WASTE MANAGEMENT ZONES

Data from VT Direct Discharge NPDES facilities 20220801.

MIXING ZONES : measured by *feet*; not to exceed 200 feet.
QUESTION: How can anyone control how big a mixing zone is and how far it extends, especially with occasional heavy rains after long dry spells?

WASTE MANAGEMENT ZONES (WMZs) : MEASURED BY MILES OF STREAM. (Examples)

Barre City	2.6 miles	Stevens Branch, Winooski
Bennington	3 miles	Walloomsac River
Bethel	1 mile	White River
Brighton	3.2 miles	Pherrins River
Burlington	2 miles	Winooski River
Ludlow	5.6 miles	Black River
Montpelier	4.5 miles	North Branch, Winooski
St. Johnsbury	4.8 miles	Passumpsic, Sleeper Rivers
West Rutland	1.5 miles	Clarendon River

Just how do these WMZs protect water quality?

PFAS are not removed from WWTF effluent to streams:

Wastewater Facility and Landfill PFAS Sampling Summary Report, 2019, Weston & Sampson, Inc. \\wse03.local\WSE\Projects\VT\VTDEC Statewide PFAS WWTF LF\Report 2019\2019 Summary Report.docx

PFAS contaminate fish in VT waters:

2021 Vermont PFAS Surface Water, Fish Tissue and Wastewater Treatment Facility Effluent Monitoring Report. April 4, 2022.
<https://dec.vermont.gov/sites/dec/files/wsm/mapp/docs/2021-PFAS-Surface-Wate-Fish-Tissue-and-WWTF-Effluent-Monitoring-Report.pdf>

EPA has updated its health advisories for PFOA to .004ppt.

Technical Fact Sheet: Drinking Water Health Advisories for Four PFAS (PFOA, PFOS, GenX chemicals, and PFBS)

www.epa.gov/system/files/documents/2022-06/drinking-water-ha-pfas-factsheet-water-system.pdf